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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,034	03/26/2004	Stephen M. Trimberger	X-1006-1D US	8432
24309	7590	10/26/2005	EXAMINER	
XILINX, INC ATTN: LEGAL DEPARTMENT 2100 LOGIC DR SAN JOSE, CA 95124			TAN, VIBOL	
			ART UNIT	PAPER NUMBER
			2819	

DATE MAILED: 10/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/810,034

Applicant(s)

TRIMBERGER, STEPHEN M.

Examiner

Vibol Tan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Wu et al. (U. S. PAT. 6,510,530).

In claim 1, Wu et al. teaches all claimed features in Fig. 1A, a method of propagating signals on interconnect in a programmable logic device, the method comprising: selecting by a selection device (16) between source signals ( $D_0$ ,  $D_1$ ) to drive a shared interconnect portion (a portion between 15 and 17/19); and coordinating latching of the source signals in corresponding capture devices (17, 19) via a time multiplexing signal generator (15) coupled to the selection device (16) and the capture devices (17, 19).

In claim 2, Wu et al. further teaches the method of Claim 1 wherein the source signals are provided by a configurable logic block (from function blocks, see Fig. 5) in the programmable logic device.

In claim 3, Wu et al. further teaches the method of Claim 1 wherein the source signals are provided by configurable logic blocks (from function blocks, see Fig. 5) in the programmable logic device.

In claim 4, Wu et al. further teaches the method of Claim 1 wherein the capture devices (17, 19) are provided in a configurable logic block (functional block) in the programmable logic device.

In claim 5, Wu et al. further teaches the method of Claim 1 wherein the capture devices (17, 19) are provided in configurable logic blocks (functional blocks) in the programmable logic device.

In claim 6, Wu et al. further teaches the method of Claim 1 wherein the source signals include non-critical signals (inherent).

In claim 7, Wu et al. further teaches the method of Claim 1 wherein the source signals include critical signals (inherent).

Claims 8 and 9, Wu et al. further teaches the method of Claim 1 wherein the capture devices comprise latches (17, 19); and connecting the selecting device to the capture devices using a programmable interconnect point (inherent).

Claims 10-12, Wu et al. teaches all claimed features in Fig. 1A, a method of propagating signals in a programmable logic device, the method comprising: selecting by a selection device (16) between source signals ( $D_0$ ,  $D_1$ ) to route signals onto a shared interconnect (a portion between 15 and 17/19); routing signals from the shared interconnect to the capture devices (17, 19) through a first programmable interconnect point (inherent); and controlling by a clock (sysClk) applied to the selection device and

capture devices the provision of the source signals through the selection device and the capture devices; wherein the capture devices comprise latches (17, 19); and wherein additional programmable interconnect points (inherent) connect the first programmable interconnect point to the capture devices.

Claims 13-15 correspond to detailed circuitry already discussed similar with regard to claims 10-12.

**Response to Arguments**

3. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

The reference of Wu et al. teaches all claimed features of claims 1-15, as set forth above.

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vibol Tan whose telephone number is (571) 272-1811. The examiner can normally be reached on Monday-Friday (7:00 AM-4:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571) 272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**VIBOL TAN**  
**PRIMARY EXAMINER**